

IDAHO DEPARTMENT OF FISH & GAME

Jerry M. Conley, Director

CLARK FORK HATCHERY

Annual Report



1 October 1981 - 30 September 1982

by

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ABSTRACT

During November, December, and January 1981-82, we spawned kokanee at Granite Creek (Sullivan Springs) kokanee trap. This involved some pretty hairy boat trips by personnel from the three northern hatcheries and various CO's from Region 1. We took 11,653,036 eggs. Five million were brought to Clark Fork Hatchery for eye-up, rearing, and release back into Sullivan Springs and the Clark Fork River; 2,043,340 eggs were sent to Sandpoint Hatchery; 3,924,860 eggs were sent to Mullan Hatchery; 487,520 eggs were shipped to Washington State for trading stock. 1,494,880 eyed eggs were shipped to Oxbow Hatchery for rearing and return to Pend Oreille Lake. 1,264,110 eyed eggs were shipped to Hayden Creek Hatchery for rearing and return. All kokanee fry were once again marked with TM-50 at Clark Fork Hatchery prior to release into the Clark Fork River at Cabinet Gorge.

As expected, the kokanee run again increased dramatically to approximately 178,000 fish. Next year's run should be about the same, or slightly larger, with a potential of 10-to-15 million eggs.

This year we did get some eggs from our hatchery Kamloops broodstock. We took 239,974 eggs and eyed up 208,890. These eggs were all shipped to Sandpoint Hatchery for rearing. We also took 27,500 Kamloops eggs from wild fish caught by hook-and-line from the Clark Fork River. Eye-up was 25,986. These eggs came from five females. They were also shipped to Sandpoint for rearing.

During May and June we took 188,652 eggs from our six-year plus cutthroat broodstock. These were not very good eggs, as the fish were too old. Also, from the three-year plus cutthroat broodstock, 246,720 eggs, again not very good, as the fish were too young. Optimum age for westslope cutthroat at Clark Fork seems to be 4+ and 5+ for good egg production. We received approximately 137,000 eyed westslope cutthroat eggs from Fish Lake via McCall Hatchery. All resulting fry were kept at Clark Fork for rearing to two year. All six-year plus spawners were planted after spawning.

From April through September we planted 18,150 pounds, or 47,890 catchable rainbow, transferred from Nampa, Hagerman, and Grace hatcheries. During this same period, we planted 338,570 cutthroat fingerlings in Hayden and Priest lakes; 183 excess cutthroat broodstock; 5,032 cutthroat fry; 10,740 kamloops fingerling; and 2,295,752 kokanee fry.

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OBJECTIVES

The objectives of the Clark Fork Hatchery are to:

1. Rear kamloops and cutthroat brood fish.
2. Spawn, rear, and distribute trout and kokanee salmon to waters of Region 1.
3. Redistribute catchable rainbow trout reared at Hagerman, Nampa, etc., into streams, lakes, and reservoirs of Region 1.

INTRODUCTION

Clark Fork Hatchery is located approximately 1.7 miles north of the town of Clark Fork on Springs Creek Road. It receives its water supply from Spring Creek, and requires eight cfs of water to operate. The hatchery has four large raceways, 8' x 312'; two medium-sized raceways, 6' x 116'; six small raceways, 6' x 53'; and four earth broodstock ponds with concrete catch basins and keyways, 16' x 195'; and is capable of raising 40,000 pounds of fish and producing 5,000,000 eggs at capacity. There is also a kokanee trap located on Sullivan Springs, about 30 miles from the hatchery, which produces up to 15,000,000 eggs annually.

FISH PRODUCTION

Kokanee (Sullivan Springs, late spawning)

Green eggs	11,653,036
Eyed eggs	4,795,216 (at Clark Fork)
Shipped	2,043,340 (green eggs to Sandpoint)
Shipped	3,924,860 (green eggs to Mullan)
Shipped	487,520 (green eggs to Washington State)
Shipped	1,494,880 (eyed eggs to Oxbow)
Shipped	1,264,110 (eyed eggs to Hayden Creek)
Eye-up %	92.5% (at Clark Fork)
Planted	2,295,752 into Pend Oreille tributaries

Six-year plus Kings Lake Cutthroat

Green eggs	188,652	
Eyed eggs	107,246	
Eye-up %	57%	(old fish)

Three-year plus Kings Lake Cutthroat (hatchery broodstock)

Green eggs	246,720	
Eyed eggs	137,784	
Eye-up %	56%	(young fish)

Kamloops (hatchery broodstock)

Green eggs	239,974	
Eyed eggs	208,890	
Eye-up %	87%	(eyed eggs to Sandpoint)
Shipped		

Kamloops (wild fish-Clark Fork River)

Green eggs	27,500	
Eyed eggs	25,986	
Eye-up %	94.5%	(shipped to Sandpoint)

Fish on Hand 1 October 1982

Kamloops	302	(broodstock)
3+ cutthroat	5,288	(broodstock)
2+ cutthroat	9,500	(future broodstock)
1+ cutthroat	13,381	(future broodstock)
1+ cutthroat	473,000	(holdovers)
0+ cutthroat	<u>401,760</u>	(holdovers)
Total	903,231	

FISH HEALTH

We had a fairly good year, fish-health wise, with one exception; during August and September we had an outbreak of IPN in our westslope cutthroat fry in the hatchery building. This was confirmed by Harold Ramsey and Charlie Smith of the Fish Disease Lab at Bozeman, Montana. Losses were relatively light for IPN, as we only lost about 10%. We kept the fish thinned out in the vats and gave them Tots of TLC. This is the only measure I know to combat the disease and it seems to work.

Once again, all eggs taken from our westslope cutthroat broodstock were water-hardened in 20 ppm Ery PO4 for one hour to control BKD. We have treated out holdover cutthroat for various external and internal bacteria several times during the year with no major losses. Bird predation was again a problem, even with screens on the ponds and raceways. Don't know just how to solve this?::

FISH TRANSFERS

No fish were transferred from Clark Fork Hatchery.

Received from transfer:

Approximately 50,000 (20,000 lbs) catchable rainbow from Nampa, Hayspur, and Grace hatcheries; 1,081,574 (1,620 lbs) kokanee from Oxbow, Hayden Creek, and Eagle; 137,000 west-slope cutthroat eggs from McCall Hatchery.

FISH RELEASES

Species	Number	Pounds	Location
RB, catchable	47,890	18,150.0	Lowland lakes and streams
CT, fingerling	338,570	13,900.0	Hayden & Priest lakes
CT, broodstock	183	366.0	Spring Creek
CT, fry	5,032	17.0	Antelope Lake
Kamloops, fingerling	10,740	75.5	Spring Creek
Kokanee	2,295,752	2,112.0	Pend Oreille tributaries
Totals	2,698,167	34,620.5	

SPAWNTAKING OPERATIONS

At Clark Fork Hatchery:

Westslope CT -- 435,372 @ 277-479/oz; 588 eggs per female.

Kamloops (hatchery broodstock) -- 239,974 @ 216-253/oz;
1,935 eggs per female.

Wild Kamloops -- 27,500 @ 135-158/oz; 5,500 eggs per female.

At Sullivan Springs:

Kokanee -- 11,653,036 @ 277-290/oz; 329 eggs per female.

FISH FEED UTILIZED

Type	Size	Pounds	Cost
Rangen	5/32	1,050	\$ 243.51
Oregon Moist	All sizes	28,250	\$10,729.01
	Totals	29,300	\$10,972.52

HATCHERY IMPROVEMENTS

Capital outlay items included:

Various tools -- approximately \$300.00;

Small arc welder -- \$190.00;

We traded two-ton fish transport trucks and tanks with Hagerman Hatchery.

SPECIAL STUDIES

No special studies were done at the hatchery during the fish year.

MISCELLANEOUS

We had our usual low-water supply problems during the fall which usually improve during the monsoon season.

We completely rebuilt the kokanee trap at Sullivan Springs this fall with monetary help from a local sportsmen's group. This should help with the egg-taking operation, as the old trap just would not handle the numbers of fish we now have running in the creek.

HATCHERY NEEDS

1. A new pipeline from the small spring to hatchery building.
2. Water alarms on the hatchery building and incubator room water supplies.
3. New concrete head **box** on supply pond pipeline to hatchery building.
4. Concrete sidewalls on all brood ponds to prevent erosion, weed and algae growth.
5. Hatchery building needs painting on inside.
6. Sell or get rid of trailer house (present crew's quarters), and rebuild addition (for a crew's quarters).

ACKNOWLEDGEMENTS

Hatchery staffing during the fish year included:

Gary Baker, Fish Hatchery Superintendent II;
Alan Williams, Fish Hatchery Superintendent I;
Bruce Thompson, Fish Culturist;
Kelli Goss, CETA and temporary laborer.